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**Project Management Office of IT Projects in
Information System Departments of the Moroccan
Public Sector: The Added Value and Challenges**

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Project Management Office of IT Projects in Information System Departments of the Moroccan Public Sector: The Added Value and Challenges

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Abstract

Purpose: Since the 90s, Moroccan Ministries have begun to see the digital transition as a necessity rather than a luxury. A great deal of attention has been paid to project management methods, particularly at structural level, with the strengthening of project management offices (PMOs). Research in this field has multiplied in an effort to define a better method for ensuring the success of IT projects. The aim of the present work is to highlight, via a literature review, the birth of the project management discipline, PMO, and the benefit and challenges of this entity for IT projects in the Moroccan public sector.

Materials and Methods: The methodology adopted is mainly based on a comparative study of the various contributions (theoretical and empirical) of the literature on the success of project management

Findings: The present work focuses, firstly, on a general overview of project

management in the public sector, then, secondly, on the emergence of this discipline in the Moroccan public sector in relation to the sector's Digital Transition and the birth of the PMO of IT projects, to end, thirdly, with a presentation of the added value of the PMO of IT projects and its challenges in the Moroccan public sector.

Implications to Theory, Practice and Policy: By continuously integrating public input and prioritizing user experience, PMOs can help build trust in government institutions and demonstrate the tangible value of digital transformation in improving everyday life.

Keywords: *Digital Transition (O33); IT Projects (O32); Organizational Performance (L25); Project Management Office (M15); Public Sector (H83)*

1.0 INTRODUCTION

In the rapidly evolving landscape of project management, the concept of the Project Management Office (PMO) has emerged as a pivotal structure in augmenting the capability of organizations to deliver projects effectively (Morris, 1997). Emanating from its traditional role as a central governing body designed to define and maintain project management standards, the PMO has transcended to become an invaluable asset that drives strategic alignment and operational excellence within institutions. This is particularly salient within the Moroccan public sector, where the complexities of governance, resource allocation, and the imperative of sustainable development demand an elevated degree of project execution proficiency.

The PMO of the Moroccan public sector is thus moving away from a one-size-fits-all solution to evolve into a nuanced entity that must manage the dual mandate of adapting international project management methodologies and integrating local relevance into their application. This comes with significant responsibilities of managing public funds, adhering to ethical standards, and promoting equitable opportunities for all stakeholders involved.

Furthermore, the emergence of new digital technologies and agile management approaches presents both challenges and opportunities for PMO units in the Moroccan public sector, particularly for information technology projects (TTP). When talking about “digital technologies and agile management”, it would be beneficial to focus on the link with how the role of the PMO has evolved over time to manage such innovation. This article will outline the mechanisms by which PMOs can leverage these innovations to improve ITP delivery, and how the Moroccan public sector is adapting to these emerging trends. The ultimate aim is to provide an overview of best practices, leadership paradigms and governance models that can enable PMOs of IT projects in Morocco's public sector to become catalysts for meaningful and sustainable change in a dynamic world.

In recent years, the implementation of Project Management Offices (PMOs) within the Information System Departments (ISDs) of governmental organizations has gained increasing attention, particularly in developing nations such as Morocco. The advent of sophisticated technologies and the ever-expanding role of information systems in public service delivery have underscored the importance of efficient project management methodologies on the one hand, and on the other, the challenges these units will face in a sector as specific as the public sector. This article titled "Project Management Office of IT projects in Information System Departments of the Moroccan public sector: Added value VS challenges" delves into the nuanced landscape of PMOs in the Moroccan public sector, exploring both their potential value and the challenges they encounter in practice.

“Management” & “Project”: The Birth of Project Management Discipline

This chapter entitled "Management and Project: Birth of the Project Management Discipline" provides a comprehensive overview of project management in the context of the digital transition in public organizations. In this chapter, we look at the concepts of "management" and "project" and examine their significance in relation to the birth of the project management discipline. Through a synthesis of current research, theoretical frameworks, and practical examples, this chapter aims to provide readers with a deeper understanding of the concepts of "Management" and "Project" and their implications for the birth of the discipline of project management. While historical insights offer crucial

foundational knowledge, the chapter explicitly bridges these historical perspectives with contemporary project management practices, with a specific focus on IT projects in the public sector. By drawing direct connections between historical development and current methodological approaches, the chapter illuminates how project management has evolved to address the complex challenges of digital transformation in public organizations. By the end of this chapter, readers will have gained valuable insights into the birth of the project management discipline and will be better equipped to understand its practical applications and relevance to the digital transition in the case of IT public sector projects.

The History of “Management”: A General Overview

Before delving into the history of management, we need to define the concept. Indeed, many authors have proposed definitions covering several periods, fields, currents, and theories, ranging from the industrial period to a more human dimension. Among these definitions, we find one that is particularly relevant in today's context, since it incorporates recent evolutions of the concept and takes into account new technologies, globalization, and organizational changes, namely that of Raymond-Alain Thiétart. In *Le Management* (Thiétart, 2003), management is defined as the action, art, or manner of leading an organization, directing it, planning its development, controlling it, and guaranteeing its smooth running. Thus, Thiétart summarized management in a few strategic functions. However, the application of these management theories in public sector projects, particularly in their unique organizational and operational contexts, warrants a deeper exploration. Historically, the “Management” puzzle has been completed by several scientific pieces, sometimes influenced by the organization's environment and other times by scientific trends. While this section touches upon the relevance of management theories to public sector projects, this connection should be more prominent, emphasizing how these theories address the specific challenges and dynamics of public administration.

First Basic Approaches

Before delving into the history of management, we need to define the concept. Indeed, many authors have proposed definitions covering several periods, fields, currents and theories, ranging from the industrial period to a more human dimension. Among these definitions, we find one that is particularly relevant in today's context, given that it incorporates recent developments in the concept and takes account of new technologies, globalization and organizational changes, namely that of Raymond-Alain Thiétart. In “The Management” (Thiétart, 2003), management is defined as the action, art or manner of leading an organization, directing it, planning its development, controlling it and guaranteeing its smooth running.

The notion of management is much older than we think, with a history stretching back thousands of years. According to Pindur, Rogers and Kim (1995) in their scientific paper “The History of Management: A Global Perspective”, the first basic approaches to management date back to at least 3000 BC, when the first records of business transactions were made by Middle Eastern priests. Around 400 BC, Socrates argued that management was a skill distinct from the mastery of technical skills and knowledge (Higgins, 1991). The Romans, famous for their legions of warriors led by centurions, introduced accountability through a hierarchy of authority. The Roman Catholic Church was organized according to specific territories, a chain of command and job descriptions. During the Middle Ages, a period of around 1,000 years, from 476 AD to 1450 AD, guilds

of craftsmen and merchants supplied handmade goods ranging from bread to armour and swords for the Crusades. A hierarchy of control and power, similar to that of the Catholic Church, existed, with authority resting with the masters and descending to the journeymen and apprentices. These craftsmen were, in essence, small businesses producing products of varying quality, with modest rates of productivity and little need for managerial control beyond that of the owner or master craftsman.

A few years later, with the rise of new technologies, a new need emerged among managers: to improve productivity and efficiency. The search for optimal business management has focused on the intricacies of work processes. Managers seek to delve deeper into task execution and its impact on productivity, striving to refine operational methodologies. In this sense, we hear of Frederick Winslow TAYLOR and his famous “Scientific Organization of Work”, Henry FAYOL and his famous “Administrative Organization of Work”, Henry FORD and his industrial method known as “Fordism”, Max Weber and his “Bureaucratic Organization of Work” based primarily on a clearly defined hierarchy of jobs, and many other authors who have enriched the discourse on management, from 1900 to 1930, in the context of an efficient production-oriented organization (Stern and Jean-Schoettl, 2017).

The above approach's simplified view of motivation did not resonate with psychologists, who argued that human motivations are more complex than simple economic incentives suggest. As a result, a current of behavioral thought emerged aimed at establishing a humanistic organizational approach. This current has introduced a new perspective by considering the behavior of the worker not only as an individual, but also as a member of a group (Kchirid and Temnati, 2021). According to the principles of the so-called humanist current, the employee within a company possesses a human dimension that leads to emotional and affective reactions and behaviors, sometimes at odds with the organization's rational logic. For the theorists of this movement, such as Mayo, Lewin, Likert, Maslow, Herzberg, McGregor or Argyris and many others who appeared in the period between 1950 and 1960, whose research was based on experiments and studies, economic performance is linked to the satisfaction of sociological and psychological needs that each individual seeks to satisfy in his or her work. They state, “Motivation is an energy directed towards satisfying a need, which manifests itself in a commitment aimed at reducing tensions” (Moulette, Roques and Tironneau, 2019).

The humanist approach, previously presented, valued the individual in his or her internal environment, to the detriment of the external environment, which is sometimes decisive for the survival of the organization. To overcome this limitation, the technocratic approach intervenes with several scientific contributions aimed at demonstrating that there is no such thing as a "perfect" organization (the famous: One best way) but that the organization differs according to several factors external to it. In the work of Woodward, Chandler, Burns and Stalker, Lawrence and Lorsh and many others, the aim is to account for the way organizations are structured, by studying the influence of contextual variables on organizational characteristics.

The technocratic approach has enabled organizations to open up and adapt to their mainly external environment. However, it is surrounded by several limitations: firstly, the multiplication of contingency variables; secondly, the dependence on a mechanistic conception of the organization; and thirdly, the conception of contingency. Since 1980, this is where the socio-economic approach comes in, taking into account both the

organization's technical-economic purpose and its human and social purpose. Faced with a complex environment, you cannot succeed without the company's people. It is a question of mobilizing the intelligence of each individual, for a participative management style in which information is shared, quality is demanded, project groups work together, and so on...

Historical approaches to management have been widely recognized, but they did not emerge in a vacuum. They were shaped by the cultural, economic and organizational realities of their time and place. Globally, many of these approaches reflect principles and methods developed in industrialized, Western contexts. But in Morocco, the story is different. Applying these ideas here is not always straightforward, as it requires a thoughtful understanding of the unique challenges we face. In Morocco, public administration operates within a framework that reflects our socio-cultural norms, our regulatory landscape and our changing priorities, such as digital transformation and sustainable development. Classical management theories, such as scientific management or the administrative approach, offer valuable lessons, but they often need to be adapted to our context. Challenges such as limited resources, complex bureaucracy and the need to balance traditional practices require several conditions to be difficult to apply. In the specific context of project management offices (PMOs) in the Moroccan public sector, these historical management theories reveal both their potential and their limitations. For example, while scientific management and administrative approaches provide valuable theoretical frameworks, their practical application requires significant contextual adaptation.

To sum it up, below Scott's frame of reference situates the organization along two axes: the conception of man (man as a tool or man as a player) and the conception of the organization in relation to the environment (closed system or open system).

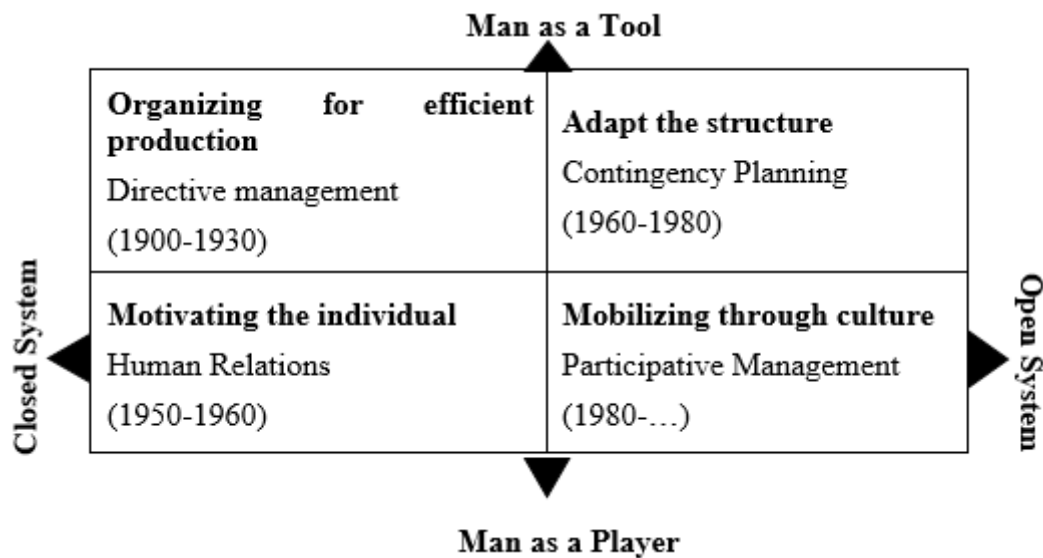


Figure 1: Scott's Frame of Reference

Source: Stern, P. & Schoettl, J.M. (2017). Sheet 07: Understanding the Managerial Environment. In *The Management Toolbox*, Dunod.

Management & Public Organizations

After a brief overview of the history of organizational management, we feel it's necessary to look at it in a context characterized by organizational and functional specificities that are at times rigid and at others flexible. According to the Encyclopedic Dictionary of Public Administration, Management applied in the public sector, known as “Public Management”, consists of a set of processes and tools designed to achieve optimum performance in an organization dedicated to public service.

Historically, public management took shape in the 1970s and 1980s. During this period, a critical discourse on state intervention and the efficiency of public management emerged. It was argued that private-sector management methods were superior to those of the public sector. Interest in these practices was strong, as they were seen as a solution to the problems of public administration (Rainey, 1990).

This perception led to a redefinition of public administration and the traditional bureaucracy described by Max Weber (Auby, 1996; Hood, 2005; Parenteau, 1994; Rainey, 1990). However, this redefinition generated tensions between two logics: that of management on the one hand, and that of legal administration on the other. The result was a conflict between the quest for performance and respect for rules and procedures.

This conflict subsided when management abandoned certain aspects of private-sector rationality, such as the pursuit of profit, to incorporate values specific to the public sector, such as fairness. Thus, management became public (Payette, 1992), and the state began to adopt a management approach rather than one of simple administration (Payette, 1992).

Public administrations are constantly striving to improve their performance. This principle lies at the heart of public management, both in theory and in practice. To achieve this, they also rely on concepts such as delegation of authority, accountability and efficiency. The English expression “Let managers manage” captures this philosophy well, emphasizing the importance of giving managers the freedom to make decisions to optimize public services.

With administrative reforms underway in many countries to “modernize” the management of public affairs, exploring the links between performance and public ethics has become crucial. This subject is of interest to managers in both public and private organizations, as well as to management researchers (Fouchet, 1999). Indeed, the introduction of a results-based management system raises fundamental questions about the nature of public service, which should be guided by both ethical principles such as neutrality, defense of the general interest, equity and solidarity, and professional principles such as effectiveness and efficiency, transparency, accountability, equity and social justice, citizen involvement, innovation and adaptability.

Public management is a bit like a jigsaw puzzle: each theory contributes an essential piece to build more efficient and responsive governance. With New Public Management (NPM), we borrow ideas from the private sector to transform public administration. The aim? Greater flexibility, concrete results and genuine citizen satisfaction, rather than getting bogged down in rigid procedures. This approach invites us to ask ourselves a simple but powerful question: “Are we really making a difference? For its part, governance theory emphasizes the power of collaboration. Imagine a symphony in which every player public institutions, private companies and civil society plays a key role in achieving ambitious results. In Morocco, this collaborative vision has been a game-

changer. It has created strong cross-sector partnerships, fostering development that is more inclusive and breaking down traditional silos.

In this way, we can see that public management offers a toolbox for the public manager to ensure good governance of the structure he or she oversees. To achieve this, the public manager needs to acquire six essential qualities mentioned by Philippe BLOCH in his book "Startup Academy: Understanding and appropriating the secrets of a new generation of entrepreneurs", described in the figure below:



Figure 2: The six Principles of the New Public Manager

Source: Bloch, P. (2008). *Startup Academy: Understanding and appropriating the secrets of a new generation of entrepreneurs*, edition Ventana.

Management in Moroccan Public Organizations

The Moroccan Public Administration Management style uses tools, techniques and methods to improve the quality of public services. The aim is to make these services more efficient, transparent and responsive, in order to better meet the evolving needs and demands of citizens. To achieve this, various efforts and strategies are being implemented to modernize administrative practices, strengthen institutional capacities and guarantee better governance. Indeed, Morocco has undertaken numerous reforms to bring its practices into line with international standards and meet the growing expectations of the population. According to the report of the Special Commission on the Development Model, published in April 2021, the main challenges for Moroccan Public Administrations are: Modernization and Digitalization, Transparency and the Fight against Corruption, Efficiency and Performance, and most recently Citizen Participation. To meet these challenges, several crucial reforms have been put in place to ensure that Morocco's Public Administrations meet citizen's expectations and requirements, and contribute to the country's overall development.

Morocco has been a forerunner in Africa in the field of public management, initiating numerous reforms of its administrations. These changes are aimed at improving governance to make the best use of resources and direct human capital towards concrete results, while ensuring citizen satisfaction. The government has embarked on an ambitious process of democratization and transparency in the management of public affairs. The aim is to make the country more attractive to foreign investment and ensure an equitable distribution of wealth (Idrissi & El Amraoui, 2018). This initiative concerns not only the state, but also all stakeholders involved in public service. Together, they are

working to streamline budgets and introduce advanced regionalization based on performance and the efficiency of expected results.

With this in mind, Morocco has initiated several projects to improve public governance. The aim is to put in place a new public management model that guarantees the efficiency of services offered to citizens, while optimizing available resources. This requires the involvement of all stakeholders in the process of modernizing governance within the public administration. It is crucial to make civil servants aware of the importance of this challenge, in order to overcome the dysfunctions and shortcomings of the current system. The axes of governance modernization can be summarized in six factors, as illustrated in the figure below.

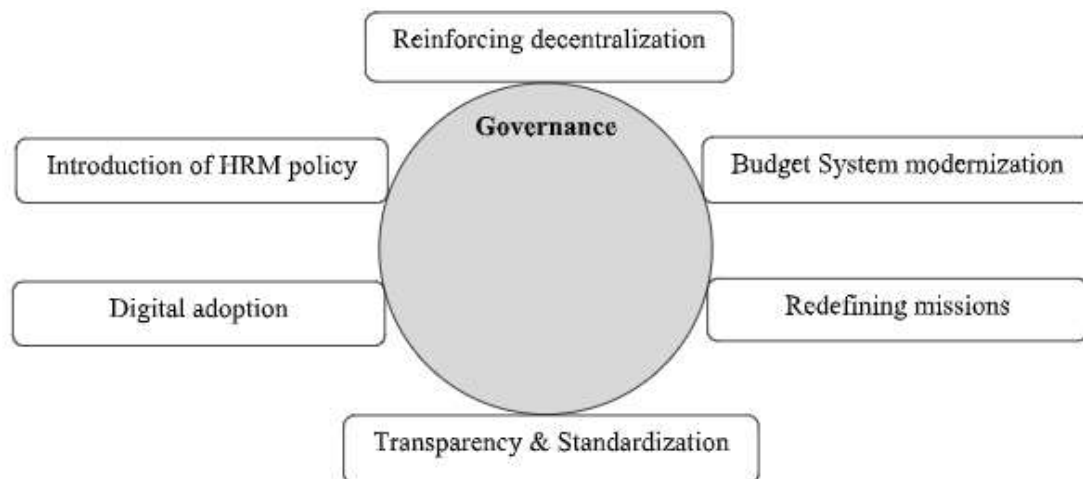


Figure 3: The Six Factors of Governance Modernization

Source : Idrissi, K. & El Amraoui, L. (2018). *Contribution of New Public Management to the Consecration of Moroccan Public Administration Performance, Revue of the Control, Accounting and Auditing*, P. 1006.

In the context of the management of public organizations, the notion of project is of crucial importance for the planning, implementation and evaluation of public policies. Projects in this field can take a variety of forms, from the development of social programs to the construction of public infrastructure. Effective management of public organizations requires the ability to design, coordinate and execute complex projects that meet the needs and expectations of citizens.

Whether it's the "electronic filing of invoices and other documents required to certify service rendered" from the Kingdom's General Treasury (TGR, Ministry of Economy and Finance), or the "National Electronic Register of Securities" from the Ministry of Justice, or the "MINHATY : Portail national des demandes de la bourse de l'enseignement supérieur et de la formation professionnelle" of the Ministère de l'Enseignement Supérieur, de la Recherche Scientifique et de l'Innovation, are all ITPs and there are many others that have left their mark on Moroccan digital technology. Many factors have contributed to the success of these projects, both at user and administrative level, including project management. The principles of project management, such as defining clear objectives, allocating appropriate resources and evaluating projects on an ongoing basis, play an essential role in achieving the missions of public organizations and delivering public services effectively. In this way, the management of public

organizations and the concept of the project are closely linked, working together to achieve objectives and respond to the challenges faced by public administrations.

The Birth of the Concept of “Project”

The notion of "Project" seems to be fundamental in many fields, whether it's construction and structural work, digital transformation or even a recruitment campaign. A project generally consists of a set of coordinated and controlled activities, with start and end dates, aimed at achieving a specific objective in full compliance with particular requirements, including constraints often relating to deadlines, costs and resources.

Etymologically, the word "Project" has several dictionary definitions, sometimes as a verb, sometimes as a noun. As a noun, it refers to a plan or proposal. As a verb, it means to push forward, dart forward or throw forward. In Latin, the term is also found as a verb (proicio, meaning to throw oneself forward) and a noun (projectio, the action of throwing oneself forward), which explains the roots of the word project. Project thus implies both action and department. The idea of "forward" implicitly incorporates notions of time and space. In French, the word projet also means to intend to do something. Thus, the word "project" meant "something that comes before realization". It referred to the development of a plan rather than its implementation. Once the plan had been realized, what resulted was called an "object".

The use of the word "project" evolved in the 1950s with the emergence of various project management techniques. Since then, the term has taken on a broader meaning, including both projects and their results. A project is often guided by a development plan or schedule, which imposes constraints and sets specific objectives and parameters. The management of large projects sometimes requires the creation of a temporary organization, consisting of a project team and several work teams. In general, a project requires human resources (such as aerodynamic specialists), material resources (such as machine tools), software resources (such as geometric modeling packages) and financial resources.

The idea of what defines a project has evolved considerably over time, moving from its traditional roots to a modern, more refined understanding that reflects changes in the way organizations operate. In the past, a project was simply seen as a temporary effort to bring together resources to achieve a specific goal. However, with the evolution of management theories and the increasing complexity of organizational requirements, project management has become a distinct and specialized discipline. Milestones along the way include the introduction of influential frameworks such as the Project Management Body of Knowledge (PMBOK), first published by the Project Management Institute (PMI) in 1996 and continually updated, with the latest edition published in 2021. Another notable development is the PRINCE2 methodology, created in the UK, which has evolved to incorporate agile practices, making it better suited to today's dynamic environments. These frameworks have helped to create standardized approaches to project planning, execution and evaluation in different business sectors. They represent an evolution from improvised methods to structured, methodical processes, underlining the critical need to align project objectives with broader organizational strategies to ensure consistent and measured success.

Thus, the notions of "Management", "Project" and "Project Management" are closely linked in the sense that the first two combine to give birth to a new discipline.

The “Project Management” Discipline

Project management is a pioneering discipline for the successful completion of any type of project. It combines several stages of planning, organizing, directing and controlling the resources, tasks and activities required to achieve specific objectives within a pre-determined timeframe. This structured approach makes it possible to manage projects more effectively and efficiently, while minimizing risks and ensuring the satisfaction of all those involved. It is defined by the PMI (Project Management Institute) as the art of structuring all the activities, resources and teams required for a project to run smoothly, with the aim of achieving a precise, value-added result. The project manager is a leader of impact and a catalyst of talent.

According to the contributions of Tom SEYMOUR and Sara HUSSEIN, Professors at Minot State University, in their scientific paper entitled "The History of Project Management", project management has been practiced since humankind first inhabited the earth. There are many examples in history of difficult projects that were successfully completed, despite all the complexities and uncertainties that could have caused the project to fail.

In 2003, Young Hoon KWAK asserts that the origins of modern project management started between 1900s and 1950s and he identified four periods in the history of modern project:

Table 1: Periods of Project Management

Periods	Characteristics of the Period
Prior to 1958	Project management transformed from a Craft system to Human Relations Administration.
From 1958 to 1979	Significant technology advancement.
From 1980 to 1994	Multitasking personal computers made an impact on many aspects of work and business including project management.
From 1995 to the Present	Technology continues to be a driving force for change, and greatly affects what project managers do.

Source: Authors own elaboration

Management of IT Projects in Moroccan Public Sector: How and Why?

IT project management has become an essential discipline in a world where technology is at the heart of all organizations, especially public ones. Managing an IT project means juggling many complex variables: teams, budgets, deadlines and technical specifications. However, why is this so crucial? Because a successful IT project can truly transform an administration. It improves processes, enhances efficiency and gives it a strong potential to meet citizens' demands. What's more, good project management reduces risk, optimizes resources and ensures that objectives are met. In short, IT project management goes far beyond the technical: it is a key strategy for ensuring the success and sustainable growth of public administrations.

Digital Transition of Moroccan Public Sector: Emergence of IT Projects

Digital transformation has become a key driver for human and economic progress. Morocco has adopted several digital initiatives over the years. It all began with the 1999-2003 five-year plan, followed by «e-Maroc 2010» covering the 2005-2010 period, then the «Digital Morocco Strategy 2013» which ran from 2009 to 2013, and finally the «Digital Morocco Strategy 2020 ». More recently, «the National Administration Reform Plan 2018-2021» was launched to modernize the administration organizationally, managerially, digitally and ethically. A new roadmap for digital development from 2021 to 2025 has also been drawn up. These different strategies share a common goal: to propel Morocco among the leading countries in digitalization. The idea is to transform information technologies into a pillar of the economy, bringing productivity and benefit to economic sectors and public administration, while contributing to human development.

Whether it's the “electronic filing of invoices and other documents required for the certification of services rendered” from the Kingdom's General Treasury (Ministry of Economy and Finance), which has improved the business climate by reducing payment times for public orders, or the “National Electronic Register of Securities” from the Ministry of Justice, which has helped to improve the performance of the judicial administration with regard to national investments, or the “MINHATY : Portail National des Demandes de la Bourse de l'Enseignement Supérieur et de la Formation Professionnelle” from the Ministry of Higher Education, Scientific Research and Innovation, which has simplified the submission of scholarship applications, are all IT projects, and there are many others that have marked Morocco's digital transition with cost and efficiency gains. Many factors have contributed to the success of these projects, whether at user or administrative level, including the way they are managed and the tools mobilized to make them effective.

In short, digital transformation has become a necessity for all organizations, and Moroccan public administrations are no exception. In order to improve services to citizens, their core mission, they are undertaking various IT projects to modernize their practices and operations, and improve their performance. However, results are not always forthcoming. The implementation of these initiatives often encounters major obstacles, such as the absence of a global vision for digital transformation, resistance to change, a still underdeveloped digital culture, limited infrastructures and an insufficient regulatory framework, all of which make Moroccan public administration less effective in meeting the demands of service users.

Why Managing IT Projects: Organizational Performance

The notion of performance is omnipresent in almost all areas of human activity. From the academic sphere, where performance is reflected in students' good grades, to the workplace, where performance is equivalent to excellence in the completion of certain tasks. Even in the case of domestic animals, we speak of performance in relation to their food production. As for objects, we hear of the performance of a car engine or that of a laptop in relation to its data storage and processing qualities. What all these examples have in common is the relationship between performance and the output or result of an activity, which must be measurable and in constant evolution.

In the field of management, the notion of performance is both complex and diverse, and often difficult to define clearly. Since the 1980s, many researchers have attempted to

define it. Campbell, in 1990, sees organizational performance as the result of the individual performance of members of the organization, internal processes and the results obtained. For their part, Richard and Johnson, in 2001, assert that organizational performance corresponds to an organization's ability to achieve its objectives and desired results, while making efficient use of its resources. Lawler and Worley, 2010, define organizational performance as the ability of an organization to generate positive and sustainable results for all its stakeholders, including employees, customers, shareholders and society as a whole. These different perspectives clearly show that the definition of organizational performance depends on the interests and viewpoints of those who analyze it.

Performance can be considered an oceanic term, given the multiple areas in which it is required within organizations (financial performance, administrative performance, organizational performance, etc.). Organizational performance, according to the OECD, is "the output or results of activities performed within the framework of objectives pursued. Its purpose is to multiply the instances in which public authorities achieve their objectives" (OECD, 2005). In the context of public administrations, results-based management is seen as a pillar of organizational performance (Mahouat & al., 2023). Thus, we can deduce that the organizational performance of a public administration depends on the factors that generate good results. In the case of public sector Information Systems Departments (ISDs), whose mission is to govern the digital transition of the department for which they are responsible with a portfolio of Information Technology Projects (ITPs), organizational performance therefore depends on the performance of each of their IT projects. This idea can be presented in the form of an equation as follows:

- The Equation:

$$\text{ISD Orga. Performance}^{*n} = \sum_{i=1}^{n} \text{IT Project Performance}_{(i)}$$

*n: the number of IT Projects in the ISD Project Portfolio.

- Descriptive Schema:

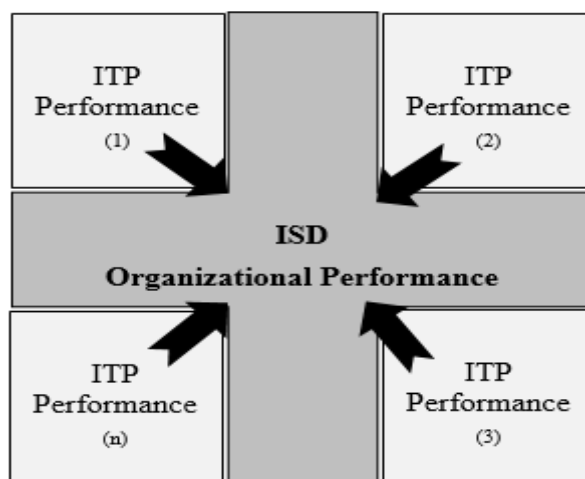


Figure 4: The Equation and its Descriptive Schema

Source: Authors Own Elaboration

Performance of an IT project is assessed in terms of its ability to attain the target cost, time and the desired level of product's quality and therefore, an IT project is considered successful if it delivers the product with pre-agreed level of quality within the given time and cost. (Agarwal & Rathod, 2006). The Standish Group's Chaos Report deals with the issue of IT projects, describing them as "successful" if they achieve the three main objectives, and "difficult" if they fail to do so. Rather than calling a project a "failure", the report prefers to speak of a "cancelled" project if it is stopped before completion. But this short-term view of a project's performance overlooks the fact that a project may be technically successful but produce software that is unusable or that does not respond well to users' needs. It must be recognized that a project can be evaluated in many different ways, and limiting performance criteria to cost, time and quality reduces the complexity inherent in software projects.

According to Agarwal & Rathod, IT project performance criteria can focus on two different aspects: characteristics internal to the project organization, which are directly linked to its technical aspects, such as time, cost and scope attainment, and characteristics external to the project organization, such as customer satisfaction with the project outcome. We argue that the first criterion is useful, since the execution, monitoring and control of an IT project are key determinants of good project management, which will guarantee a deliverable that meets stakeholder expectations. Good IT project management cannot be achieved without the presence of a Project Management Office (PMO) with a multi-disciplinary team and standard methods.

How Managing IT Projects: The Project Management Office (PMO)

According to PMI, a Project Management Office (PMO) is a functional group whose mission is to coordinate and manage the projects under its responsibility. The success and effectiveness of a PMO rests on the functions it decides to implement and its ability to adapt and adjust to achieve the organization's objectives (Syed Ehtesham, 2015).

Müller & al. (2013) point out that setting up PMOs can make project management much more efficient. They believe that PMOs help teams learn from past mistakes and successes while also providing valuable support for projects and different management levels. However, Salamah and Alnaji (2014) highlight that creating a PMO isn't always smooth sailing. They discovered that there are several hurdles to overcome, and these can make or break the success of a PMO (El Yacoubi & Jahidi & El Amrani, 2019).

For Moroccan public organizations, as for those on an international scale, setting up a PMO is a very important added value, insofar as it brings together a number of factors that help guarantee high-level project performance and deal with certain difficulties that stand in the way of successful projects.

Since the 2000s, digitalization, alongside the simplification of administrative procedures, has made its debut in the telecoms sector, before timidly spreading to other sectors. Several Ministerial Departments in Morocco (MDM) have embarked on a wave of organizational change, integrating into their structures an entity dedicated to the governance of digital transformation (Information Systems Department, ISD). The mission of these departments is to implement a digital transformation strategy via a panoply of IT projects aimed at simplifying administrative procedures, establishing a climate of trust between the citizen and the administration, and building data-rich

databases that will provide reliable statistics to help decision-makers make relevant decisions.

The launch of IT projects requires the presence within these departments of a project management entity to ensure the successful completion of IT projects, and to cope with the likely organizational, cultural and even sometimes political challenges that will limit the project as a whole or even the project management entity (PMO).

PMO of IT Projects in Information System Departments of the Moroccan Public Sector: The Added Value and Challenges

Technological watch, Project Management Office, Leading Organizational Change and many others are all functions that have recently been integrated into the organization charts of the information systems departments responsible for the digital transformation of Moroccan ministerial departments. The IT Project PMO will certainly add a great deal of value by ensuring efficient and consistent management of IT projects. By centralizing project planning, monitoring and evaluation, the PMO will ensure optimum use of resources and better compliance with international standards. This approach contributes to improving IT project performance and meeting citizens' demands for digital services. However, the PMO will face multiple challenges, such as resistance to change within the organization and on the part of stakeholders, lack of specialized IT skills (IT development, telecoms infrastructure and networks, database management, etc.) and budgetary constraints.

In Morocco, public-sector IT projects are highly ambitious, but face persistent difficulties. The “Portail National des Services Publics”, for example, has experienced delays due to coordination problems and under-utilization of technical resources. Efforts to digitize local administrative procedures have also encountered resistance to change and uneven adoption. Deeper issues compound these difficulties: a limited digital infrastructure, a shortage of qualified IT professionals and bureaucratic obstacles often slow progress. Budgetary constraints further complicate matters, particularly in remote municipalities where modern tools remain out of reach. In the face of these pressures, public administrations are striving to modernize their services in order to meet citizens' growing expectations. Strengthening governance structures, such as PMOs, could prove essential in overcoming these difficulties and ensuring that IT projects realize their life-enhancing potential.

The success of this structure therefore hinges on the ability to overcome these obstacles, promote a rigorous project management culture and constantly adapt to technological and regulatory developments.

PMO's Added Value

The study of PMOs in different organizational contexts highlights the factors that influence project performance, as well as their benefit and the assessment of their impact on project management and organizational strategy (Hobbs & Aubry, 2007). We can deduce from the work of Anantatmula & Rad (2018) that setting up a PMO for IT projects in the public context will improve project management performance through better coordination within the organization, more effective resources to achieve objectives.

The analysis of several references highlights several key elements for successful IT projects:

- Setting clear and precise objectives, which is essential for measuring progress and project success;
- Obtaining commitment and support from senior management, which is essential for mobilizing resources and making decisions;
- Understand stakeholder needs to ensure they are met;
- Establish effective communication to inform, coordinate and motivate teams;
- Remain flexible and adaptable to cope with unexpected and unavoidable changes.

Implementing a PMO in a department of information systems can greatly enhance project management maturity within the department, in the sense that a well-structured environment facilitates the adoption of best practices that strengthen the department's overall performance. However, it is just as important to remain flexible and agile to adapt to the changing needs of stakeholders. The aim is to strike the right balance between solid structure and adaptability.

A PMO can also help the top management of information systems departments to achieve their corporate objectives more effectively by prioritizing certain projects over others. A better understanding of the reasons for these priorities can also reduce frustrations among staff and other collaborators, frustrations which can often lead to professional disengagement and a lack of commitment.

Setting up a PMO is not something that happens overnight. It's crucial that the person in charge gets acclimatized to the department and starts by managing two or three of its main tasks before taking on more complex roles such as project portfolio coordination, resource management, strategic planning and continuous improvement, among others. Only once the PMO has proven its value and effectiveness, does it gain the recognition of all stakeholders. This approach takes time and requires careful preparation. As with any project, the success of a PMO depends on its integration into the department's culture and business, and on the department's awareness of the benefits it can bring.

As with any major initiative, the success of a PMO depends on how well it fits into the department's culture, and how clearly its benefits are communicated. A good PMO doesn't just impose a structure, it strikes a balance between order and flexibility. By adopting methodologies such as “Agile”, he can remain adaptable while keeping projects on track. Agile practices, for example, enable the PMO to respond quickly to changing priorities and encourage continuous improvement, ensuring that it fosters innovation and creativity rather than stifling them.

PMO's Challenges

Evolve or disappear, that's the challenge. PMOs that don't create value for IT departments are doomed to disappear from their organizational charts. And therein lies the problem. But PMO departments face a number of challenges in managing their own change. In concrete terms, we can identify 7 challenges to be overcome if the PMO's role is to be seen as essential to the IT department's value streams:

- Align the project portfolio with the department's IT strategy;
- Manage resources agilely and efficiently;
- Be responsive to changes during the course of a project;
- Communicate effectively with management;
- Promote managerial agility;
- Standardize processes and workflows;

- Renew the project portfolio management tool.

A study of the various scientific contributions in the field of the value of PMOs for IT projects highlights the difficulty of assessing their added value within IT departments. Indeed, setting up a PMO can represent a substantial investment compared to their actual contribution to certain IT projects (Hobbs & Aubry, 2007), and there is not always a significant improvement in project success linked to the presence of a PMO (Darling & Whitty, 2016). What's more, in many cases IT departments view the PMO primarily as a reporting tool, offering little real support to project teams. Inadequate integration within the organization can be problematic, so it's essential to clearly clarify its roles and responsibilities (Darling & Whitty, 2016). The complexity of IT projects and the lack of reliable, unbiased evaluation methods make it difficult to measure their real impact. Thus, the major challenge remains to demonstrate the true added value of PMOs for IT departments.

2.0 CONCLUSIONS AND RECOMMENDATIONS

Conclusion

In conclusion, setting up a PMO for IT projects within the IT departments of Moroccan ministries represents both challenges and many promising opportunities. Although various studies reveal varying opinions on the added value of PMOs, it is indisputable that strategic integration and clarification of roles are essential to maximize their effectiveness. By adopting proactive resource management and a commitment to continuous improvement, PMOs have the potential to strengthen IT project governance, optimize delivery processes and promote a culture of excellence and accountability within public institutions.

To meet these challenges, we need more than technical solutions - we need approaches tailored to the unique needs of the sector. Developing effective evaluation methods is essential, but so is fostering close collaboration between project teams, PMO managers and institutional decision-makers. This collaboration can be nurtured through practical measures such as regular meetings to align with project objectives, maintaining open and transparent communication for timely updates, and organizing joint workshops or training sessions to build trust and ensure that everyone is on the same page. So, by adopting a thoughtful and flexible approach, PMOs can become key drivers of digital transformation, helping to modernize public services and meet the growing expectations of citizens and stakeholders.

Beyond their role in project governance, PMOs have a direct impact on citizens by promoting the provision of user-friendly, efficient and accessible digital services. A citizen-centric PMO ensures that projects are designed with the public's needs in mind, whether by simplifying administrative procedures, improving service accessibility for remote or underserved communities, or enabling real-time feedback from users. By continuously integrating public input and prioritizing user experience, PMOs can help build trust in government institutions and demonstrate the tangible value of digital transformation in improving everyday life.

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